MESOSCALE DISCUSSION 1576 NWS STORM PREDICTION CENTER NORMAN OK 1104 AM CDT THU JUL 16 2009

AREAS AFFECTED...CNTRL NY INTO WRN NEW ENGLAND

CONCERNING...SEVERE POTENTIAL...WATCH POSSIBLE

VALID 161604Z - 161730Z

THE THREAT FOR SEVERE STORMS CAPABLE OF DAMAGING WINDS AND HAIL IS EXPECTED TO DEVELOP EWD ACROSS DISCUSSION AREA THIS AFTERNOON. CONVECTIVE TRENDS ARE BEING MONITORED FOR A WW.

LATEST MESOANALYSIS INDICATED COLD FRONT PUSHING EWD THROUGH THE LEE OF LAKES ONTARIO AND ERIE WITH AN ASSOCIATED WARM FRONT /ORIENTED GENERALLY N-S/ SITUATED ALONG A LINE FROM NEAR UCA TO MSV TO WRN LONG ISLAND. TSTMS ARE BEGINNING TO DEVELOP WITHIN CURRENTLY NARROW WARM SECTOR OVER WAYNE...CAYUGA AND ONONDAGA COUNTIES NY WHERE TEMPERATURES HAVE WARMED INTO THE UPPER 70S...CONTRIBUTING TO MLCAPE OF AROUND 1000 J/KG.

SHORT TERM MODEL GUIDANCE SUGGESTS TSTMS SHOULD CONTINUE TO INCREASE IN COVERAGE AND INTENSITY TODAY IN ADVANCE OF SURFACE COLD FRONT AS IT APPROACHES THE HUDSON VALLEY. CONTINUED BOUNDARY LAYER HEATING COMBINED WITH DEWPOINTS OF 65-70 F SHOULD SUPPORT AN INCREASE IN MLCAPE TO 1000-2000 J/KG. WHEN COUPLED WITH MODEST /30-40 KT/UNIDIRECTIONAL...DEEP WLY SHEAR...SETUP WILL FAVOR THE DEVELOPMENT OF LINE SEGMENTS AND ORGANIZED STORM CLUSTERS CAPABLE OF DAMAGING WIND GUSTS AND HAIL.

..MEAD.. 07/16/2009

ATTN...WFO...BOX...BTV...OKX...ALY...BGM...BUF...

LAT...LON 42677602 43897553 44477484 44497418 44137307 42847264 41767297 41267368 41417468 41887535 42677602